

SEQUENCE LISTING

<110> Corrado FOGHER

<120> Food flours with specific technological characteristics and low allergenicity

<130> 4161-12 / BX1898R

<140> US 10/534,742

<141> 2005-05-12

<150> PCT/IB2003/005092

<151> 2003-11-12

<150> IT BO2002A000714

<151> 2002-11-13

<160> 44

<170> MS Word

<210> 1

<211> 830

<212> PRT

<213> Wheat

<400> 1

Met Thr Lys Arg Leu Val Leu Phe Ala Ala Val Val Val Ala Leu Val  
1 5 10 15

Ala Leu Thr Ala Ala Glu Gly Glu Ala Ser Gly Gln Leu Gln Cys Glu  
20 25 30

Arg Glu Leu Gln Glu His Ser Leu Lys Ala Cys Arg Gln Val Val Asp  
35 40 45

Gln Gln Leu Arg Asp Val Ser Pro Glu Cys Gln Pro Val Gly Gly  
50 55 60

Pro Val Ala Arg Gln Tyr Glu Gln Gln Val Val Val Pro Pro Lys Gly  
65 70 75 80

Gly Ser Phe Tyr Pro Gly Glu Thr Thr Pro Pro Gln Gln Leu Gln Gln  
85 90 95

Ser Ile Leu Trp Gly Ile Pro Ala Leu Leu Arg Arg Tyr Tyr Leu Ser  
100 105 110

Val Thr Ser Pro Gln Gln Val Ser Tyr Tyr Pro Gly Gln Ala Ser Ser  
115 120 125

Gln Arg Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Glu Tyr  
130 135 140

Tyr Leu Thr Ser Pro Gln Gln Ser Gly Gln Trp Gln Gln Pro Gly Gln  
 145 150 155 160  
 Gly Gln Ala Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Glu  
 165 170 175  
 Gln Pro Gly Tyr Tyr Pro Thr Ser Pro Trp Gln Pro Glu Gln Leu Gln  
 180 185 190  
 Gln Pro Thr Gln Gly Gln Gln Arg Gln Gln Pro Gly Gln Gly Gln Gln  
 195 200 205  
 Leu Arg Gln Gly Gln Gln Gly Gln Gln Ser Gly Gln Gly Gln Pro Arg  
 210 215 220  
 Tyr Tyr Pro Thr Ser Ser Gln Gln Pro Gly Gln Leu Gln Gln Leu Ala  
 225 230 235 240  
 Gln Gly Gln Gln Gly Gln Gln Pro Glu Arg Gly Gln Gln Gly Gln Gln  
 245 250 255  
 Ser Gly Gln Gly Gln Gln Leu Gly Gln Gly Gln Gln Gly Gln Gln Pro  
 260 265 270  
 Gly Gln Lys Gln Gln Ser Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Ile  
 275 280 285  
 Ser Pro Gln Gln Leu Gly Gln Gly Gln Ser Gly Gln Gly Gln Leu  
 290 295 300  
 Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Gly Gln Ser Gly  
 305 310 315 320  
 Tyr Tyr Pro Thr Ser Ala Gln Gln Pro Gly Gln Leu Gln Gln Ser Thr  
 325 330 335  
 Gln Glu Gln Gln Leu Gly Gln Glu Gln Gln Asp Gln Gln Ser Gly Gln  
 340 345 350  
 Gly Arg Gln Gly Gln Gln Ser Gly Gln Arg Gln Gln Asp Gln Gln Ser  
 355 360 365  
 Gly Gln Gly Gln Gln Pro Gly Gln Arg Gln Pro Gly Tyr Tyr Ser Thr  
 370 375 380  
 Ser Pro Gln Gln Leu Gly Gln Gly Gln Pro Arg Tyr Tyr Pro Thr Ser  
 385 390 395 400  
 Pro Gln Gln Pro Gly Gln Glu Gln Gln Pro Arg Gln Leu Gln Gln Pro  
 405 410 415  
 Glu Gln Gly Gln Gln Gly Gln Gln Pro Glu Gln Gly Gln Gln Gly Gln  
 420 425 430  
 Gln Pro Gly Gln Gly Glu Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln  
 435 440 445

Gly Gln Gln Pro Gly Gln Gly Gln Pro Gly Tyr Tyr Pro Thr Ser Pro  
450 455 460

Gln Gln Ser Gly Gln Gly Gln Pro Gly Tyr Tyr Pro Thr Ser Pro Gln  
465 470 475 480

Gln Ser Gly Gln Leu Gln Gln Pro Ala Gln Gly Gln Gln Pro Gly Gln  
485 490 495

Glu Gln Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly Gln Gln Pro  
500 505 510

Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln Pro Gly Tyr Tyr Pro Thr  
515 520 525

Ser Pro Gln Gln Ser Gly Gln Glu Gln Gln Leu Glu Gln Trp Gln Gln  
530 535 540

Ser Gly Gln Gly Gln Pro Gly His Tyr Pro Thr Ser Pro Leu Gln Pro  
545 550 555 560

Gly Gln Gly Gln Pro Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ile Gly  
565 570 575

Gln Gly Gln Gln Pro Gly Gln Leu Gln Gln Pro Thr Gln Gly Gln Gln  
580 585 590

Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly Gln Gln Pro Gly Gln Gly  
595 600 605

Gln Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Pro Gly Gln Gln  
610 615 620

Pro Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Ser Gly Gln Gly Gln Gln  
625 630 635 640

Pro Gly Gln Trp Gln Gln Pro Gly Gln Gly Leu Pro Gly Tyr Tyr Pro  
645 650 655

Thr Ser Ser Leu Gln Pro Glu Gln Gly Gln Gln Gly Tyr Tyr Pro Thr  
660 665 670

Ser Gln Gln Gln Pro Gly Gln Gly Pro Gln Pro Gly Gln Trp Gln Gln  
675 680 685

Ser Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser  
690 695 700

Gly Gln Gly Gln Gln Pro Gly Gln Trp Leu Gln Pro Gly Gln Trp Leu  
705 710 715 720

Gln Ser Gly Tyr Tyr Leu Thr Ser Pro Gln Gln Leu Gly Gln Gly Gln  
725 730 735

Gln Pro Arg Gln Trp Leu Gln Pro Arg Gln Gly Gln Gln Gly Tyr Tyr  
740 745 750

Pro	Thr	Ser	Pro	Gln	Gln	Ser	Gly	Gln	Gly	Gln	Gln	Leu	Gly	Gln	Gly
755							760					765			
Gln	Gln	Gly	Tyr	Tyr	Pro	Thr	Ser	Pro	Gln	Gln	Ser	Gly	Gln	Gly	Gln
770							775					780			
Gln	Gly	Tyr	Asp	Ser	Pro	Tyr	His	Val	Ser	Ala	Glu	His	Gln	Ala	Ala
785							790				795			800	
Ser	Leu	Lys	Val	Ala	Lys	Ala	Gln	Gln	Leu	Ala	Ala	Gln	Leu	Pro	Ala
							805				810			815	
Met	Cys	Arg	Leu	Glu	Gly	Gly	Asp	Ala	Leu	Leu	Ala	Ser	Gln		
							820				825			830	

<210> 2  
<211> 815  
<212> PRT  
<213> Wheat

<400> 2

Met	Thr	Lys	Arg	Leu	Val	Leu	Phe	Ala	Ala	Val	Val	Val	Ala	Leu	Val
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Ala	Leu	Thr	Ala	Ala	Glu	Gly	Glu	Ala	Ser	Gly	Gln	Leu	Gln	Cys	Glu
							20			25			30		
Arg	Glu	Leu	Gln	Glu	His	Ser	Leu	Lys	Ala	Cys	Arg	Gln	Val	Val	Asp
							35			40			45		
Gln	Gln	Leu	Arg	Asp	Val	Ser	Pro	Glu	Cys	Gln	Pro	Val	Gly	Gly	
							50			55			60		
Pro	Val	Ala	Arg	Gln	Tyr	Glu	Gln	Gln	Val	Val	Val	Pro	Pro	Lys	Gly
							65			70			75		80
Gly	Ser	Phe	Tyr	Pro	Gly	Glu	Thr	Thr	Pro	Pro	Gln	Gln	Leu	Gln	Gln
							85			90			95		
Ser	Ile	Leu	Trp	Gly	Ile	Pro	Ala	Leu	Leu	Arg	Arg	Tyr	Tyr	Leu	Ser
							100			105			110		
Val	Thr	Ser	Pro	Gln	Gln	Val	Ser	Tyr	Tyr	Pro	Gly	Gln	Ala	Ser	Ser
							115			120			125		
Gln	Arg	Pro	Gly	Gln	Gly	Gln	Gln	Glu	Tyr	Tyr	Leu	Thr	Ser	Pro	Gln
							130			135			140		
Gln	Ser	Gly	Gln	Trp	Gln	Gln	Pro	Gly	Gln	Gly	Gln	Ser	Gly	Tyr	Tyr
							145			150			155		160
Pro	Thr	Ser	Pro	Gln	Gln	Ser	Gly	Gln	Lys	Gln	Pro	Gly	Tyr	Tyr	Pro
							165			170			175		

Thr Ser Pro Trp Gln Pro Glu Gln Leu Gln Gln Pro Thr Gln Gly Gln  
180 185 190

Gln Arg Gln Gln Pro Gly Gln Gly Gln Gln Leu Arg Gln Gly Gln Gln  
195 200 205

Gly Gln Gln Ser Gly Gln Gly Gln Pro Arg Tyr Tyr Pro Thr Ser Ser  
210 215 220

Gln Gln Pro Gly Gln Gln Leu Gln Gln Ala Gln Gly Gln Gln Gly Gln  
225 230 235 240

Gln Pro Glu Arg Gly Gln Gln Gly Gln Gln Ser Gly Gln Gly Gln Gln  
245 250 255

Leu Gly Gln Gly Gln Gln Gly Gln Gln Pro Gly Gln Lys Gln Gln Ser  
260 265 270

Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Ile Ser Pro Gln Gln Leu Gly  
275 280 285

Gln Gly Gln Gln Ser Gly Gln Gly Gln Leu Gly Tyr Tyr Pro Thr Ser  
290 295 300

Pro Gln Gln Ser Gly Gln Gly Gln Ser Gly Tyr Tyr Pro Thr Ser Ala  
305 310 315 320

Gln Gln Pro Gly Gln Leu Gln Gln Ser Thr Gln Glu Gln Gln Leu Gly  
325 330 335

Gln Glu Gln Gln Asp Gln Gln Ser Gly Gln Gly Arg Gln Gly Gln Gln  
340 345 350

Ser Gly Gln Arg Gln Gln Asp Gln Gln Ser Gly Gln Gly Gln Gln Pro  
355 360 365

Gly Gln Arg Gln Pro Gly Tyr Tyr Ser Thr Ser Pro Gln Gln Leu Gly  
370 375 380

Gln Gly Gln Pro Arg Tyr Tyr Pro Thr Ser Pro Gln Gln Pro Gly Gln  
385 390 395 400

Glu Gln Gln Pro Arg Gln Leu Gln Gln Pro Glu Gln Gly Gln Gln Gly  
405 410 415

Gln Gln Pro Glu Gln Gly Gln Gln Gln Gln Arg Gln Gly Glu  
420 425 430

Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gln Gln Pro Gly Gln  
435 440 445

Gly Gln Pro Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Gly  
450 455 460

Gln Pro Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Leu Gln  
465 470 475 480

Gln Pro Ala Gln Gly Gln Gln Pro Gly Gln Glu Gln Gln Gly Gln Gln  
485 490 495

Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln Pro Gly Tyr Tyr Pro  
500 505 510

Thr Ser Pro Gln Gln Ser Gly Gln Glu Gln Gln Leu Glu Gln Trp Gln  
515 520 525

Gln Ser Gly Gln Gly Gln Pro Gly His Tyr Pro Thr Ser Pro Leu Gln  
530 535 540

Pro Gly Gln Gly Gln Pro Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ile  
545 550 555 560

Gly Gln Gly Gln Gln Pro Gly Gln Leu Gln Gln Pro Thr Gln Gly Gln  
565 570 575

Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gln Gln Pro Gly Glu  
580 585 590

Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly  
595 600 605

Gln Pro Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Ser Gly Gln Gln  
610 615 620

Gln Pro Gly Gln Trp Gln Gln Pro Gly Gln Gly Gln Pro Gly Tyr Tyr  
625 630 635 640

Pro Thr Ser Ser Leu Gln Pro Glu Gln Gly Gln Gln Gly Tyr Tyr Pro  
645 650 655

Thr Ser Gln Gln Gln Pro Gly Gln Gly Pro Gln Pro Gly Gln Trp Gln  
660 665 670

Gln Ser Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln  
675 680 685

Ser Gly Gln Gly Gln Gln Pro Gly Gln Trp Leu Gln Pro Gly Gln Trp  
690 695 700

Leu Gln Ser Gly Tyr Tyr Leu Thr Ser Pro Gln Gln Leu Gly Gln Gly  
705 710 715 720

Gln Gln Pro Arg Gln Trp Leu Gln Pro Arg Gln Gly Gln Gln Gly Tyr  
725 730 735

Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Gly Gln Gln Leu Gly Gln  
740 745 750

Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Gly  
755 760 765

Gln Gln Gly Tyr Asp Ser Pro Tyr His Val Ser Ala Glu His Gln Ala  
770 775 780

Ala Ser Leu Lys Val Ala Lys Ala Gln Gln Leu Ala Ala Gln Leu Pro  
 785                    790                    795                    800  
  
 Ala Met Cys Arg Leu Glu Gly Gly Asp Ala Leu Leu Ala Ser Gln  
 805                    810                    815  
  
 <210> 3  
 <211> 839  
 <212> PRT  
 <213> Wheat  
  
 <400> 3  
  
 Met Ala Lys Arg Leu Val Leu Phe Val Ala Val Val Val Ala Leu Val  
 1                    5                    10                    15  
  
 Ala Leu Thr Val Ala Glu Gly Glu Ala Ser Glu Gln Leu Gln Cys Glu  
 20                    25                    30  
  
 Arg Glu Leu Gln Glu Leu Gln Glu Arg Glu Leu Lys Ala Cys Gln Gln  
 35                    40                    45  
  
 Val Met Asp Gln Gln Leu Arg Asp Ile Ser Pro Glu Cys His Pro Val  
 50                    55                    60  
  
 Val Val Ser Pro Val Ala Gly Gln Tyr Glu Gln Gln Ile Val Val Pro  
 65                    70                    75                    80  
  
 Pro Lys Gly Gly Ser Phe Tyr Pro Gly Glu Thr Thr Pro Pro Gln Gln  
 85                    90                    95  
  
 Leu Gln Gln Arg Ile Phe Trp Gly Ile Pro Ala Leu Leu Lys Arg Tyr  
 100                    105                    110  
  
 Tyr Pro Ser Val Thr Cys Pro Gln Gln Val Ser Tyr Tyr Pro Gly Gln  
 115                    120                    125  
  
 Ala Ser Pro Gln Arg Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln  
 130                    135                    140  
  
 Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Pro Gly Gln Trp Gln Gln  
 145                    150                    155                    160  
  
 Pro Glu Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Pro  
 165                    170                    175  
  
 Gly Gln Leu Gln Gln Pro Ala Gln Gly Gln Gln Pro Gly Gln Gly Gln  
 180                    185                    190  
  
 Gln Gly Gln Gln Pro Gly Gln Gly Gln Pro Gly Tyr Tyr Pro Thr Ser  
 195                    200                    205  
  
 Ser Gln Leu Gln Pro Gly Gln Leu Gln Gln Pro Ala Gln Gly Gln Gln  
 210                    215                    220  
  
 Gly Gln Gln Pro Gly Gln Ala Gln Gln Gly Gln Gln Pro Gly Gln Gly  
 225                    230                    235                    240

Gln Gln Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln  
245 250 255

Gln Pro Gly Gln Gly Gln Gln Gln Leu Gly Gln Gly Gln Gln  
260 265 270

Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Ser Gly Gln Gly Gln Pro Gly  
275 280 285

Tyr Tyr Pro Thr Ser Leu Gln Gln Leu Gly Gln Gly Gln Ser Gly Tyr  
290 295 300

Tyr Pro Thr Ser Pro Gln Gln Pro Gly Gln Gly Gln Gln Pro Gly Gln  
305 310 315 320

Leu Gln Gln Pro Ala Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly  
325 330 335

Gln Gln Pro Gly Gln Gly Gln Gln Gln Gln Pro Gly Gln Gly Gln  
340 345 350

Gln Pro Gly Gln Gly Gln Pro Gly Tyr Tyr Pro Thr Ser Pro Gln Gln  
355 360 365

Ser Gly Gln Gly Gln Pro Gly Tyr Tyr Pro Thr Ser Ser Gln Gln Pro  
370 375 380

Thr Gln Ser Gln Gln Pro Gly Gln Gly Gln Gln Gln Gln Val Gly  
385 390 395 400

Gln Gly Gln Gln Ala Gln Gln Pro Gly Gln Gly Gln Gln Pro Gly Gln  
405 410 415

Gly Gln Pro Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Gly  
420 425 430

Gln Pro Gly Tyr Tyr Leu Thr Ser Pro Gln Gln Ser Gly Gln Gly Gln  
435 440 445

Gln Pro Gly Gln Leu Gln Gln Ser Ala Gln Gly Gln Lys Gly Gln Gln  
450 455 460

Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly Gln Gln Pro  
465 470 475 480

Gly Gln Gly Gln Gln Gly Gln Gln Pro Gly Gln Gly Gln Pro Gly Tyr  
485 490 495

Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Gly Gln Gln Pro Gly Gln  
500 505 510

Trp Gln Gln Pro Gly Gln Gly Gln Pro Gly Tyr Tyr Pro Thr Ser Pro  
515 520 525

Leu Gln Pro Gly Gln Gly Gln Pro Gly Tyr Asp Pro Thr Ser Pro Gln  
530 535 540

Gln Pro Gly Gln Gly Gln Gln Pro Gly Gln Leu Gln Gln Pro Ala Gln  
 545 550 555 560  
 Gly Gln Gln Gly Gln Gln Leu Ala Gln Gly Gln Gln Gly Gln Gln Pro  
 565 570 575  
 Ala Gln Val Gln Gln Gly Gln Gln Pro Ala Gln Gly Gln Gln Gly Gln  
 580 585 590  
 Gln Leu Gly Gln Gly Gln Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln  
 595 600 605  
 Gly Gln Gln Pro Ala Gln Gly Gln Gln Gly Gln Gln Pro Gly Gln Gly  
 610 615 620  
 Gln His Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly Gln Gln Pro Gly  
 625 630 635 640  
 Gln Gly Gln Gln Pro Gly Gln Gly Gln Pro Trp Tyr Tyr Pro Thr Ser  
 645 650 655  
 Pro Gln Glu Ser Gly Gln Gly Gln Gln Pro Gly Gln Trp Gln Gln Pro  
 660 665 670  
 Gly Gln Gly Gln Pro Gly Tyr Tyr Leu Thr Phe Ser Val Ala Ala Arg  
 675 680 685  
 Thr Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Pro Gly Gln  
 690 695 700  
 Gly Gln Gln Pro Gly Gln Trp Gln Gln Ser Gly Gln Gly Gln His Trp  
 705 710 715 720  
 Tyr Tyr Pro Thr Ser Pro Lys Leu Ser Gly Gln Gly Gln Arg Pro Gly  
 725 730 735  
 Gln Trp Leu Gln Pro Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser  
 740 745 750  
 Pro Gln Gln Pro Pro Gln Gly Gln Gln Leu Gly Gln Trp Leu Gln Pro  
 755 760 765  
 Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Thr Gly  
 770 775 780  
 Gln Gly Gln Gln Ser Gly Gln Gly Gln Gln Gly Tyr Tyr Ser Ser Tyr  
 785 790 795 800  
 His Val Ser Val Glu His Gln Ala Ala Ser Leu Lys Val Ala Lys Ala  
 805 810 815  
 Gln Gln Leu Ala Ala Gln Leu Pro Ala Met Cys Arg Leu Glu Gly Gly  
 820 825 830  
 Asp Ala Leu Ser Ala Ser Gln  
 835

<210> 4  
<211> 838  
<212> PRT  
<213> Wheat

<400> 4

Met Ala Lys Arg Leu Val Leu Phe Val Ala Val Val Val Ala Leu Val  
1 5 10 15

Ala Leu Thr Val Ala Glu Gly Glu Ala Ser Glu Gln Leu Gln Cys Glu  
20 25 30

Arg Glu Leu Gln Glu Leu Gln Glu Arg Glu Leu Lys Ala Cys Gln Gln  
35 40 45

Val Met Asp Gln Gln Leu Arg Asp Ile Ser Pro Glu Cys His Pro Val  
50 55 60

Val Val Ser Pro Val Ala Gly Gln Tyr Glu Gln Gln Ile Val Val Pro  
65 70 75 80

Lys Gly Gly Ser Phe Tyr Pro Gly Glu Thr Thr Pro Pro Gln Gln Leu  
85 90 95

Gln Gln Arg Ile Phe Trp Gly Ile Pro Ala Leu Leu Lys Arg Tyr Tyr  
100 105 110

Pro Ser Val Thr Ser Pro Gln Gln Val Ser Tyr Tyr Pro Gly Gln Ala  
115 120 125

Ser Pro Gln Arg Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln  
130 135 140

Ser Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Pro  
145 150 155 160

Gly Gln Trp Gln Gln Pro Glu Gln Gly Gln Pro Gly Tyr Tyr Pro Thr  
165 170 175

Ser Pro Gln Gln Pro Gly Gln Leu Gln Gln Pro Ala Gln Gly Gln Gln  
180 185 190

Pro Gly Gln Gly Gln Gln Gly Arg Gln Pro Gly Gln Gly Gln Pro Gly  
195 200 205

Tyr Tyr Pro Thr Ser Ser Gln Leu Gln Pro Gly Gln Leu Gln Gln Pro  
210 215 220

Ala Gln Gly Gln Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly Gln  
225 230 235 240

Gln Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly Gln Gln  
245 250 255

Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gln Gln Leu  
260 265 270

Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Ser Gly  
275 280 285

Gln Gly Gln Pro Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Leu Gly Gln  
290 295 300

Gly Gln Ser Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Pro Gly Gln Gly  
305 310 315 320

Gln Gln Pro Gly Gln Leu Gln Gln Pro Ala Gln Gly Gln Gln Pro Glu  
325 330 335

Gln Gly Gln Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly Gln Gln  
340 345 350

Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln Pro Gly Tyr Tyr Pro  
355 360 365

Thr Ser Pro Gln Gln Ser Gly Gln Gln Pro Gly Tyr Tyr Pro Thr  
370 375 380

Ser Ser Gln Gln Pro Thr Gln Ser Gln Gln Pro Gly Gln Gly Gln Gln  
385 390 395 400

Gly Gln Gln Val Gly Gln Gly Gln Gln Ala Gln Gln Pro Gly Gln Gly  
405 410 415

Gln Gln Pro Gly Gln Gln Pro Gly Tyr Tyr Pro Thr Ser Pro Leu  
420 425 430

Gln Ser Gly Gln Gly Gln Pro Gly Tyr Tyr Leu Thr Ser Pro Gln Gln  
435 440 445

Ser Gly Gln Gly Gln Gln Pro Gly Gln Leu Gln Gln Ser Ala Gln Gly  
450 455 460

Gln Lys Gly Gln Gln Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln  
465 470 475 480

Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gln Gln Pro Gly Gln  
485 490 495

Gly Gln Pro Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Gly  
500 505 510

Gln Gln Pro Gly Gln Trp Gln Gln Pro Gly Gln Gly Gln Pro Gly Tyr  
515 520 525

Tyr Pro Thr Ser Pro Leu Gln Pro Gly Gln Gly Gln Pro Gly Tyr Asp  
530 535 540

Pro Thr Ser Pro Gln Gln Pro Gly Gln Gly Gln Gln Pro Gly Gln Leu  
545 550 555 560

Gln Gln Pro Ala Gln Gly Gln Gln Gln Leu Ala Gln Gly Gln  
                  565                     570                     575  
  
 Gln Gly Gln Gln Pro Ala Gln Val Gln Gln Gly Gln Gln Pro Ala Gln  
                  580                     585                     590  
  
 Gly Gln Gln Gly Gln Gln Leu Gly Gln Gln Gly Gln Gln Pro  
                  595                     600                     605  
  
 Gly Gln Gly Gln Gln Pro Ala Gln Gly Gln Gln Gly Gln Gln Pro Gly  
                  610                     615                     620  
  
 Gln Gly Gln Gln Gly Gln Gln Pro Gly Gln Gln Gln Pro Gly Gln  
                  625                     630                     635                     640  
  
 Gly Gln Pro Trp Tyr Tyr Pro Thr Ser Pro Gln Glu Ser Gly Gln Gly  
                  645                     650                     655  
  
 Gln Gln Pro Gly Gln Trp Gln Gln Pro Gly Gln Trp Gln Gln Pro Gly  
                  660                     665                     670  
  
 Gln Gly Gln Pro Gly Tyr Tyr Leu Thr Ser Pro Leu Gln Leu Gly Gln  
                  675                     680                     685  
  
 Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Pro Gly Gln Gly  
                  690                     695                     700  
  
 Gln Gln Pro Gly Gln Trp Gln Gln Ser Gly Gln Gly Gln His Gly Tyr  
                  705                     710                     715                     720  
  
 Tyr Pro Thr Ser Pro Gln Leu Ser Gly Gln Gly Gln Arg Pro Gly Gln  
                  725                     730                     735  
  
 Trp Leu Gln Pro Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro  
                  740                     745                     750  
  
 Gln Gln Ser Gly Gln Gly Gln Gln Leu Gly Gln Trp Leu Gln Pro Gly  
                  755                     760                     765  
  
 Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Thr Gly Gln  
                  770                     775                     780  
  
 Gly Gln Gln Ser Gly Gln Gly Gln Gln Gly Tyr Tyr Ser Ser Tyr His  
                  785                     790                     795                     800  
  
 Val Ser Val Glu His Gln Ala Ala Ser Leu Lys Val Ala Lys Ala Gln  
                  805                     810                     815  
  
 Gln Leu Ala Ala Gln Leu Pro Ala Met Cys Arg Leu Glu Gly Gly Asp  
                  820                     825                     830  
  
 Ala Leu Ser Ala Ser Gln  
                  835

<210> 5  
 <211> 789

<212> PRT  
<213> Wheat

<400> 5

Met Ala Lys Arg Leu Val Leu Phe Ala Ala Val Val Val Ala Leu Val  
1 5 10 15

Ala Leu Thr Ala Ala Glu Gly Glu Ala Ser Gly Gln Leu Gln Cys Glu  
20 25 30

His Glu Leu Glu Ala Cys Gln Gln Val Val Asp Gln Gln Leu Arg Asp  
35 40 45

Val Ser Pro Gly Cys Arg Pro Ile Thr Val Ser Pro Gly Thr Arg Gln  
50 55 60

Tyr Glu Gln Gln Pro Val Val Pro Ser Lys Ala Gly Ser Phe Tyr Pro  
65 70 75 80

Ser Glu Thr Thr Pro Ser Gln Gln Leu Gln Gln Met Ile Phe Trp Gly  
85 90 95

Ile Pro Ala Leu Leu Arg Arg Tyr Tyr Pro Ser Val Thr Ser Ser Gln  
100 105 110

Gln Gly Ser Tyr Tyr Pro Gly Gln Ala Ser Pro Gln Gln Ser Gly Gln  
115 120 125

Gly Gln Gln Pro Gly Gln Glu Gln Gln Pro Gly Gln Gly Gln Gln Asp  
130 135 140

Gln Gln Pro Gly Gln Arg Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln  
145 150 155 160

Gln Pro Gly Gln Gln Gln Leu Gly Gln Gly Gln Pro Gly Tyr Tyr  
165 170 175

Pro Thr Ser Gln Gln Pro Gly Gln Lys Gln Gln Ala Gly Gln Gly Gln  
180 185 190

Gln Ser Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln  
195 200 205

Ser Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln Pro Gly Tyr Tyr Pro  
210 215 220

Thr Ser Pro Gln Gln Ser Gly Gln Trp Gln Gln Pro Gly Gln Gly Gln  
225 230 235 240

Gln Pro Gly Gln Gly Gln Gln Ser Gly Gln Gly Gln Gln Gly Gln Gln  
245 250 255

Pro Gly Gln Gly Gln Arg Pro Gly Gln Gly Gln Gln Gly Tyr Tyr Pro  
260 265 270

Ile Ser Pro Gln Gln Pro Gly Gln Gly Gln Ser Gly Gln Gly Gln  
 275 280 285  
 Pro Gly Tyr Tyr Pro Thr Ser Leu Arg Gln Pro Gly Gln Trp Gln Gln  
 290 295 300  
 Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly Gln Gln Pro  
 305 310 315 320  
 Gly Gln Gly Gln Ser Gly Gln Gly Gln Gly Tyr Tyr Pro Thr  
 325 330 335  
 Ser Leu Gln Gln Pro Gly Gln Gly Gln Leu Gly Gln Gly Gln Pro  
 340 345 350  
 Gly Tyr Tyr Pro Thr Ser Gln Gln Ser Glu Gln Gly Gln Gln Pro Gly  
 355 360 365  
 Gln Gly Lys Gln Pro Gly Gln Gly Gln Gly Tyr Tyr Pro Thr Ser  
 370 375 380  
 Pro Gln Gln Ser Gly Gln Gly Gln Gln Leu Gly Gln Gly Gln Pro Gly  
 385 390 395 400  
 Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Gly Gln Gln Ser Gly  
 405 410 415  
 Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln  
 420 425 430  
 Gly Gln Gln Pro Gly Gln Gly Gln Ser Gly Tyr Phe Pro Thr Ser Arg  
 435 440 445  
 Gln Gln Ser Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Ser Gly  
 450 455 460  
 Gln Gly Gln Gln Gly Gln Gln Pro Gly Gln Gly Gln Ala Tyr Tyr  
 465 470 475 480  
 Pro Thr Ser Ser Gln Gln Ser Arg Gln Arg Gln Gln Ala Gly Gln Trp  
 485 490 495  
 Gln Arg Pro Gly Gln Gln Pro Gly Tyr Tyr Pro Thr Ser Pro Gln  
 500 505 510  
 Gln Pro Gly Gln Glu Gln Gln Ser Gly Gln Ala Gln Gln Ser Gly Gln  
 515 520 525  
 Trp Gln Leu Val Tyr Tyr Pro Thr Ser Pro Gln Gln Pro Gly Gln Leu  
 530 535 540  
 Gln Gln Pro Ala Gln Gln Gln Pro Ala Gln Gly Gln Gln Ser Ala  
 545 550 555 560  
 Gln Glu Gln Gln Pro Gly Gln Ala Gln Gln Ser Gly Gln Trp Gln Leu  
 565 570 575

Val Tyr Tyr Pro Thr Ser Pro Gln Gln Pro Gly Gln Leu Gln Gln Pro  
 580 585 590  
 Ala Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly  
 595 600 605  
 Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln  
 610 615 620  
 Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Gly  
 625 630 635 640  
 Gln Gln Pro Gly Gln Gln Gln Pro Arg Gln Gly Gln Gln Gly Tyr  
 645 650 655  
 Tyr Pro Ile Ser Pro Gln Gln Ser Gly Gln Gly Gln Gln Pro Gly Gln  
 660 665 670  
 Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Gly  
 675 680 685  
 Gln Gln Pro Gly His Glu Gln Gln Pro Gly Gln Trp Leu Gln Pro Gly  
 690 695 700  
 Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Ser Gln Gln Ser Gly Gln  
 705 710 715 720  
 Gly His Gln Ser Gly Gln Gln Gln Gly Tyr Tyr Pro Thr Ser Leu  
 725 730 735  
 Trp Gln Pro Gly Gln Gln Gln Gly Tyr Ala Ser Pro Tyr His Val  
 740 745 750  
 Ser Ala Glu Tyr Gln Ala Ala Arg Leu Lys Val Ala Lys Ala Gln Gln  
 755 760 765  
 Leu Ala Ala Gln Leu Pro Ala Met Cys Arg Leu Glu Gly Ser Asp Ala  
 770 775 780  
 Leu Ser Thr Arg Gln  
 785  
  
 <210> 6  
 <211> 660  
 <212> PRT  
 <213> Wheat  
  
 <400> 6  
  
 Met Ala Lys Arg Leu Val Leu Phe Ala Ala Val Val Ile Ala Leu Val  
 1 5 10 15  
  
 Ala Leu Thr Thr Ala Glu Gly Glu Ala Ser Arg Gln Leu Gln Cys Glu  
 20 25 30

Arg Glu Leu Gln Glu Ser Ser Leu Glu Ala Cys Arg Gln Val Val Asp  
 35 40 45

Gln Gln Leu Ala Gly Arg Leu Pro Trp Ser Thr Gly Leu Gln Met Arg  
 50 55 60

Cys Cys Gln Gln Leu Arg Asp Val Ser Ala Lys Cys Arg Ser Val Ala  
 65 70 75 80

Val Ser Gln Val Ala Arg Gln Tyr Glu Gln Thr Val Val Pro Pro Lys  
 85 90 95

Gly Gly Ser Phe Tyr Pro Gly Glu Thr Thr Pro Leu Gln Gln Leu Gln  
 100 105 110

Gln Gly Ile Phe Trp Gly Thr Ser Ser Gln Thr Val Gln Gly Tyr Tyr  
 115 120 125

Pro Ser Val Thr Ser Pro Arg Gln Gly Ser Tyr Tyr Pro Gly Gln Ala  
 130 135 140

Ser Pro Gln Gln Pro Gly Gln Gly Gln Gln Pro Gly Lys Trp Gln Glu  
 145 150 155 160

Pro Gly Gln Gly Gln Gln Trp Tyr Tyr Pro Thr Ser Leu Gln Gln Pro  
 165 170 175

Gly Gln Gly Gln Gln Ile Gly Lys Gly Lys Gln Gly Tyr Tyr Pro Thr  
 180 185 190

Ser Leu Gln Gln Pro Gly Gln Gly Gln Ile Gly Gln Gln Gln  
 195 200 205

Gly Tyr Tyr Pro Thr Ser Pro Gln His Thr Gly Gln Arg Gln Gln Pro  
 210 215 220

Val Gln Gly Gln Gln Ile Gly Gln Gly Gln Gln Pro Glu Gln Gly Gln  
 225 230 235 240

Gln Pro Gly Gln Trp Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln  
 245 250 255

Leu Gly Gln Gly Gln Gln Pro Gly Gln Trp Gln Gln Ser Gly Gln Gly  
 260 265 270

Gln Gln Gly His Tyr Pro Thr Ser Leu Gln Gln Pro Gly Gln Gly Gln  
 275 280 285

Gln Gly His Tyr Leu Ala Ser Gln Gln Gln Pro Ala Gln Gly Gln Gln  
 290 295 300

Gly His Tyr Pro Ala Ser Gln Gln Gln Pro Gly Gln Gly Gln Gln Gly  
 305 310 315 320

His Tyr Pro Ala Ser Gln Gln Gln Pro Gly Gln Gly Gln Gln Gly His  
 325 330 335

Tyr Pro Ala Ser Gln Gln Glu Pro Gly Gln Gly Gln Gln Ile  
 340 345 350  
 Pro Ala Ser Gln Gln Gln Pro Gly Gln Gly Gln Gln Gly His Tyr Pro  
 355 360 365  
 Ala Ser Leu Gln Gln Pro Gly Gln Gln Gly His Tyr Pro Thr Ser Leu  
 370 375 380  
 Gln Gln Leu Gly Gln Gln Gln Ile Gly Gln Pro Gly Gln Lys Gln  
 385 390 395 400  
 Gln Pro Gly Gln Gly Gln Gln Thr Gly Gln Gly Gln Gln Pro Glu Gln  
 405 410 415  
 Glu Gln Gln Pro Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Leu  
 420 425 430  
 Gln Gln Pro Gly Gln Gly Gln Gln Gln Gly Gln Gln Gln Gly Tyr  
 435 440 445  
 Tyr Pro Thr Ser Leu Gln Gln Pro Gly Gln Gly Gln Gln Gly His Tyr  
 450 455 460  
 Pro Ala Ser Leu Gln Gln Pro Gly Gln Gly Gln Gln Pro Gly Gln  
 465 470 475 480  
 Arg Gln Gln Pro Gly Gln Gly Gln His Pro Glu Gln Gly Gln Gln Pro  
 485 490 495  
 Gly Gln Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Pro Gly  
 500 505 510  
 Gln Gly Gln Gln Leu Gly Gln Gln Gln Gly Tyr Tyr Pro Thr Ser  
 515 520 525  
 Pro Gln Gln Pro Gly Gln Gln Gln Pro Gly Gln Gly Gln Gln Gly  
 530 535 540  
 His Cys Pro Met Ser Pro Gln Gln Thr Gly Gln Ala Gln Gln Leu Gly  
 545 550 555 560  
 Gln Gly Gln Gln Ile Gly Gln Val Gln Gln Pro Gly Gln Gln Gln  
 565 570 575  
 Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Pro Gly Gln Gly Gln Gln Ser  
 580 585 590  
 Gly Gln Gln Gln Ser Gly Gln Gly His Gln Pro Gly Gln Gly Gln  
 595 600 605  
 Gln Ser Gly Gln Glu Lys Gln Gly Tyr Asp Ser Pro Tyr His Val Ser  
 610 615 620  
 Ala Glu Gln Gln Ala Ala Ser Pro Met Val Ala Lys Ala Gln Gln Pro  
 625 630 635 640

Ala Thr Gln Leu Pro Thr Val Cys Arg Met Glu Gly Gly Asp Ala Leu  
645 650 655

Ser Ala Ser Gln  
660

<210> 7  
<211> 648  
<212> PRT  
<213> Wheat

<400> 7

Met Ala Lys Arg Leu Val Leu Phe Ala Ala Val Val Ile Ala Leu Val  
1 5 10 15

Ala Leu Thr Thr Ala Glu Gly Glu Ala Ser Arg Gln Leu Gln Cys Glu  
20 25 30

Arg Glu Leu Gln Glu Ser Ser Leu Glu Ala Cys Arg Gln Val Val Asp  
35 40 45

Gln Gln Leu Ala Gly Arg Leu Pro Trp Ser Thr Gly Leu Gln Met Arg  
50 55 60

Cys Cys Gln Gln Leu Arg Asp Val Ser Ala Lys Cys Arg Ser Val Ala  
65 70 75 80

Val Ser Gln Val Ala Arg Gln Tyr Glu Gln Thr Val Val Pro Pro Lys  
85 90 95

Gly Gly Ser Phe Tyr Pro Gly Glu Thr Thr Pro Leu Gln Gln Leu Gln  
100 105 110

Gln Gly Ile Phe Trp Gly Thr Ser Ser Gln Thr Val Gln Gly Tyr Tyr  
115 120 125

Pro Gly Val Thr Ser Pro Arg Gln Gly Ser Tyr Tyr Pro Gly Gln Ala  
130 135 140

Ser Pro Gln Gln Pro Gly Gln Gly Gln Pro Gly Lys Trp Gln Glu  
145 150 155 160

Pro Gly Gln Gly Gln Gln Trp Tyr Tyr Pro Thr Ser Leu Gln Gln Pro  
165 170 175

Gly Gln Gly Gln Gln Ile Gly Lys Gly Gln Gln Gly Tyr Tyr Pro Thr  
180 185 190

Ser Leu Gln Gln Pro Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser  
195 200 205

Leu Gln His Thr Gly Gln Arg Gln Gln Pro Val Gln Gly Gln Gln Pro  
210 215 220

Glu Gln Gly Gln Gln Pro Gly Gln Trp Gln Gln Gly Tyr Tyr Pro Thr  
 225 230 235 240

Ser Pro Gln Gln Leu Gly Gln Gly Gln Pro Arg Gln Trp Gln Gln  
 245 250 255

Ser Gly Gln Gly Gln Gln Gly His Tyr Pro Thr Ser Leu Gln Gln Pro  
 260 265 270

Gly Gln Gly Gln Gln Gly His Tyr Leu Ala Ser Gln Gln Gln Pro Gly  
 275 280 285

Gln Gln Gln Gly His Tyr Pro Ala Ser Gln Gln Gln Pro Gly Gln  
 290 295 300

Gly Gln Gln Gly His Tyr Pro Ala Ser Gln Gln Gln Pro Gly Gln Gly  
 305 310 315 320

Gln Gln Gly His Tyr Pro Ala Ser Gln Gln Glu Pro Gly Gln Gln  
 325 330 335

Gln Gln Ile Pro Ala Ser Gln Gln Pro Gly Gln Gln Gln  
 340 345 350

Gly His Tyr Pro Ala Ser Leu Gln Gln Pro Gly Gln Gln Gln Gly  
 355 360 365

His Tyr Pro Thr Ser Leu Gln Gln Leu Gly Gln Gln Gln Thr Gly  
 370 375 380

Gln Pro Gly Gln Lys Gln Gln Pro Gly Gln Gly Gln Gln Thr Gly Gln  
 385 390 395 400

Gly Gln Gln Pro Glu Gln Glu Gln Gln Pro Gly Gln Gln Gln Gly  
 405 410 415

Tyr Tyr Pro Thr Ser Leu Gln Gln Pro Gly Gln Gly Gln Gln Gln Gly  
 420 425 430

Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Pro Gly Gln  
 435 440 445

Gly Gln Gln Gly His Tyr Pro Ala Ser Leu Gln Gln Pro Gly Gln Gly  
 450 455 460

Gln Pro Gly Gln Arg Gln Gln Pro Gly Gln Gly Gln His Pro Glu Gln  
 465 470 475 480

Gly Lys Gln Pro Gly Gln Gln Gln Gly Tyr Tyr Pro Thr Ser Pro  
 485 490 495

Gln Gln Pro Gly Gln Gln Gly Gln Leu Gly Gln Gln Gln Gly Tyr  
 500 505 510

Tyr Pro Thr Ser Pro Gln Gln Pro Gly Gln Gln Gln Pro Gly Gln  
 515 520 525

Gly Gln Gln Gly His Cys Pro Thr Ser Pro Gln Gln Ser Gly Gln Ala  
 530 535 540  
 Gln Gln Pro Gly Gln Gly Gln Gln Ile Gly Gln Val Gln Gln Pro Gly  
 545 550 555 560  
 Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Val Gln Gln Pro Gly Gln  
 565 570 575  
 Gly Gln Gln Ser Gly Gln Gln Ser Gly Gln Gly His Gln Pro  
 580 585 590  
 Gly Gln Gly Gln Gln Ser Gly Gln Glu Gln Gln Gly Tyr Asp Ser Pro  
 595 600 605  
 Tyr His Val Ser Ala Glu Gln Gln Ala Ala Ser Pro Met Val Ala Lys  
 610 615 620  
 Ala Gln Gln Pro Ala Thr Gln Leu Pro Thr Val Cys Arg Met Glu Gly  
 625 630 635 640  
 Gly Asp Ala Leu Ser Ala Ser Gln  
 645

<210> 8  
 <211> 705  
 <212> PRT  
 <213> Wheat

<400> 8

Met Ala Lys Arg Leu Val Leu Phe Ala Thr Val Val Ile Thr Leu Val  
 1 5 10 15  
 Ala Leu Thr Ala Ala Glu Gly Glu Ala Ser Arg Gln Leu Gln Cys Glu  
 20 25 30  
 Arg Glu Leu Gln Glu Ser Ser Leu Glu Ala Cys Arg Gln Val Val Asp  
 35 40 45  
 Gln Gln Leu Ala Gly Arg Leu Pro Trp Ser Thr Gly Leu Gln Met Arg  
 50 55 60  
 Cys Cys Gln Gln Leu Arg Asp Val Ser Ala Lys Cys Arg Pro Val Ala  
 65 70 75 80  
 Val Ser Gln Val Val Arg Gln Tyr Glu Gln Thr Val Val Pro Pro Lys  
 85 90 95  
 Gly Gly Ser Phe Tyr Pro Gly Glu Thr Thr Pro Leu Gln Gln Leu Gln  
 100 105 110  
 Gln Val Ile Phe Trp Gly Thr Ser Ser Gln Thr Val Gln Gly Tyr Tyr  
 115 120 125

Pro Ser Val Ser Ser Pro Gln Gln Gly Pro Tyr Tyr Pro Gly Gln Ala  
 130 135 140

Ser Pro Gln Gln Pro Gly Gln Gly Gln Gln Pro Gly Lys Trp Gln Glu  
 145 150 155 160

Leu Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Leu His Gln Ser  
 165 170 175

Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Ser Ser Leu Gln Gln Pro Gly  
 180 185 190

Gln Gly Gln Gln Ile Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser  
 195 200 205

Leu Gln Gln Pro Gly Gln Gly Gln Gln Ile Gly Gln Gln Gln Gly  
 210 215 220

Tyr Tyr Pro Thr Ser Pro Gln His Pro Gly Gln Arg Gln Gln Pro Gly  
 225 230 235 240

Gln Gly Gln Gln Ile Gly Gln Gly Gln Leu Gly Gln Gly Arg Gln  
 245 250 255

Ile Gly Gln Gly Gln Gln Ser Gly Gln Gly Gln Gln Gly Tyr Tyr Pro  
 260 265 270

Thr Ser Pro Gln Gln Leu Gly Gln Gly Gln Gln Pro Gly Gln Trp Gln  
 275 280 285

Gln Ser Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Gln Gln Gln  
 290 295 300

Pro Gly Gln Gly Gln Gln Gly Gln Tyr Pro Ala Ser Gln Gln Gln Pro  
 305 310 315 320

Gly Gln Gly Gln Gln Gly Gln Tyr Pro Ala Ser Gln Gln Gln Pro Gly  
 325 330 335

Gln Gly Gln Gln Gly Gln Tyr Pro Ala Ser Gln Gln Gln Pro Gly Gln  
 340 345 350

Gly Gln Gln Gly His Tyr Leu Ala Ser Gln Gln Gln Pro Gly Gln Gly  
 355 360 365

Gln Gln Arg His Tyr Pro Ala Ser Leu Gln Gln Pro Gly Gln Gln Gln  
 370 375 380

Gln Gly His Tyr Thr Ala Ser Leu Gln Gln Pro Gly Gln Gly Gln Gln  
 385 390 395 400

Gly His Tyr Pro Ala Ser Leu Gln Gln Val Gly Gln Gly Gln Gln Ile  
 405 410 415

Gly Gln Leu Gly Gln Arg Gln Gln Pro Gly Gln Gly Gln Gln Thr Arg  
 420 425 430

Gln Gly Gln Gln Leu Glu Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln  
 435 440 445

Thr Arg Gln Gly Gln Gln Leu Glu Gln Gly Gln Gln Pro Gly Gln Gly  
 450 455 460

Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Gly Gln  
 465 470 475 480

Gln Pro Gly Gln Ser Gln Gln Pro Gly Gln Gly Gln Gln Gly Tyr Tyr  
 485 490 495

Ser Ser Ser Leu Gln Gln Pro Gly Gln Gly Leu Gln Gly His Tyr Pro  
 500 505 510

Ala Ser Leu Gln Gln Pro Gly Gln Gly His Pro Gly Gln Arg Gln Gln  
 515 520 525

Pro Gly Gln Gly Gln Gln Pro Glu Gln Gly Gln Gln Pro Gly Gln Gly  
 530 535 540

Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Pro Gly Gln Gly Lys  
 545 550 555 560

Gln Leu Gly Gln Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln  
 565 570 575

Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly His Cys Pro  
 580 585 590

Thr Ser Pro Gln Gln Thr Gly Gln Ala Gln Gln Pro Gly Gln Gly Gln  
 595 600 605

Gln Ile Gly Gln Val Gln Gln Pro Gly Gln Gly Gln Gln Gly Tyr Tyr  
 610 615 620

Pro Ile Ser Leu Gln Gln Ser Gly Gln Gly Gln Gln Ser Gly Gln Gly  
 625 630 635 640

Gln Gln Ser Gly Gln Gly His Gln Leu Gly Gln Gly Gln Gln Ser Gly  
 645 650 655

Gln Glu Gln Gln Gly Tyr Asp Asn Pro Tyr His Val Asn Thr Glu Gln  
 660 665 670

Gln Thr Ala Ser Pro Lys Val Ala Lys Val Gln Gln Pro Ala Thr Gln  
 675 680 685

Leu Pro Ile Met Cys Arg Met Glu Gly Gly Asp Ala Leu Ser Ala Ser  
 690 695 700

Gln  
 705

<210> 9  
 <211> 602

<212> PRT  
<213> Wheat

<400> 9

Met Ala Lys Arg Leu Val Leu Phe Ala Thr Val Val Ile Gly Leu Val  
1 5 10 15

Ser Leu Thr Val Ala Glu Gly Glu Ala Ser Lys Gln Leu Gln Cys Glu  
20 25 30

Arg Glu Leu Gln Glu Ser Ser Leu Glu Ala Cys Arg Leu Val Val Asp  
35 40 45

Gln Gln Leu Ala Ser Arg Leu Pro Trp Ser Thr Gly Leu Gln Met Arg  
50 55 60

Cys Cys Gln Gln Leu Arg Asp Ile Ser Ala Lys Cys Arg Pro Val Ala  
65 70 75 80

Leu Ser Gln Val Ala Arg Gln Tyr Gly Gln Thr Ala Val Pro Pro Lys  
85 90 95

Gly Gly Pro Phe Tyr His Arg Glu Thr Thr Pro Leu Gln Gln Leu Gln  
100 105 110

Gln Gly Ile Phe Gly Gly Thr Ser Ser Gln Thr Val Gln Gly Tyr Tyr  
115 120 125

Pro Ser Val Ile Ser Pro Gln Gln Gly Ser Tyr Tyr Pro Gly Gln Ala  
130 135 140

Ser Pro Gln Gln Pro Gly Lys Trp Gln Glu Leu Gly Gln Gly Gln Gln  
145 150 155 160

Trp Tyr Tyr Pro Thr Ser Leu Gln Gln Pro Gly Gln Gly Gln Gln Gly  
165 170 175

Tyr Tyr Arg Thr Ser Leu Gln Gln Pro Gly Gln Arg Gln Gln Gly Tyr  
180 185 190

Tyr Arg Thr Ser Leu Gln Gln Pro Gly Gln Gln Gln Ile Gly Gln  
195 200 205

Trp Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln His Pro Gly Gln Gly  
210 215 220

Gln Gln Pro Gly Gln Val Gln Lys Ile Gly Gln Gly Gln Gln Pro Glu  
225 230 235 240

Lys Gly Gln Gln Leu Gly Gln Glu Gln Gln Ile Gly Gln Gly Gln Gln  
245 250 255

Pro Glu Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly  
260 265 270

Gln Gln Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Pro Gly Gln Gly Gln  
 275 280 285  
 Gln Pro Gly Gln Trp Gln Gln Pro Gly Gln Gly Gln Gln Gly Tyr Tyr  
 290 295 300  
 Pro Thr Ser Leu Gln Gln Pro Val Gln Gly Gln Gln Gly His Tyr Pro  
 305 310 315 320  
 Ala Ser Gln His Gln Pro Gly Gln Gly Gln Gln Gly His Gln Pro Ala  
 325 330 335  
 Ser Leu Gln Leu Ser Gly Gln Gly Gln Gln Gly His His Pro Ala Ser  
 340 345 350  
 Leu Gln Gln Pro Gly Gln Gly Lys Gln Thr Gly Gln Arg Glu Gln Arg  
 355 360 365  
 Gln Gln Pro Gly Gln Gly Gln Gln Thr Gly Gln Gly Gln Gln Pro Glu  
 370 375 380  
 Gln Glu Gln Gln Pro Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Tyr  
 385 390 395 400  
 Leu Gln Gln Pro Gly Gln Gly Gln Gln Pro Glu Gln Trp Gln Gln Pro  
 405 410 415  
 Gly Gln Gly Gln Gln Gly His Tyr Pro Ala Ser Leu Gln Gln Ser Gly  
 420 425 430  
 Gln Gly Gln Gln Gly His Tyr Pro Ala Ser Leu Gln Gln Leu Gly Gln  
 435 440 445  
 Gly Gln Pro Gly Gln Thr Gln Gln Pro Gly Gln Gly Gln Gln Pro Glu  
 450 455 460  
 Gln Glu Glu Gln Ser Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser  
 465 470 475 480  
 Pro Gln Gln Pro Gly Gln Gly Gln Gln Gly His Phe Pro Thr Ser Gly  
 485 490 495  
 Gln Ala Gln Gln Pro Gly Gln Gly Gln Gln Ile Gly Gln Ala Gln Gln  
 500 505 510  
 Leu Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Pro  
 515 520 525  
 Gly Gln Glu Gln Gln Ser Gly Gln Gly Gln Gln Leu Gly Gln Gly His  
 530 535 540  
 Gln Pro Gly Gln Gly Gln Gln Ser Gly Gln Glu Gln Gln Gly Tyr Asp  
 545 550 555 560  
 Ser Pro Tyr His Val Ser Val Glu Gln Gln Ala Ala Ser Pro Lys Val  
 565 570 575

Ala Lys Ala His His Pro Val Ala Gln Leu Pro Thr Met Cys Gln Met  
580 585 590

Glu Gly Gly Asp Ala Leu Ser Ala Ser Gln  
595 600

<210> 10  
<211> 621  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Consensus sequence derived from wheat sequences of Table 1

<400> 10

Met Ala Lys Arg Leu Val Leu Phe Ala Ala Val Val Val Ala Leu Val  
1 5 10 15

Ala Leu Thr Ala Glu Gly Glu Ala Ser Gln Leu Gln Cys Glu Arg Glu  
20 25 30

Leu Gln Glu Ser Leu Ala Cys Arg Gln Val Val Asp Gln Gln Leu Arg  
35 40 45

Asp Val Ser Pro Cys Arg Pro Val Val Ser Pro Val Ala Arg Gln Tyr  
50 55 60

Glu Gln Gln Val Val Pro Pro Lys Gly Gly Ser Phe Tyr Pro Gly Glu  
65 70 75 80

Thr Thr Pro Gln Gln Leu Gln Ile Phe Trp Gly Ile Pro Ala Leu  
85 90 95

Leu Arg Tyr Tyr Pro Ser Val Thr Ser Pro Gln Gln Gly Ser Tyr Tyr  
100 105 110

Pro Gly Gln Ala Ser Pro Gln Gln Pro Gly Gln Gln Gln Pro Gly  
115 120 125

Gln Gly Gln Gln Gly Tyr Tyr Thr Ser Pro Gln Gln Pro Gly Gln Gln  
130 135 140

Gln Gly Gln Gly Gln Gly Tyr Tyr Pro Thr Ser Gln Gln Pro Gly Gln  
145 150 155 160

Gln Gln Gln Gly Gln Gln Gly Gln Pro Gly Tyr Tyr Pro Thr  
165 170 175

Ser Gln Pro Gly Gln Gln Pro Gln Gly Gln Gln Gln Gln Gln Gly  
180 185 190

Gln Gln Gly Gln Gly Gln Gln Gly Gln Gln Gln Gln Gln Pro  
195 200 205

Gly Gln Gln Gln Gly Gln Gly Gln Gln Gln Pro Gln Gln Ser  
210 215 220

Gly Gln Gly Gln Gly Tyr Tyr Pro Thr Ser Gln Gln Pro Gly Gln Gly  
225 230 235 240

Gln Gln Gln Gln Gln Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln  
245 250 255

Gly Gln Gln Pro Gly Gln Gly Gln Pro Gly Gln Gly Gln Gln Gly  
260 265 270

Tyr Tyr Pro Thr Ser Gln Gln Pro Gly Gln Gly Gln Gln Gly Tyr Pro  
275 280 285

Ser Gln Gln Pro Gly Gln Gln Pro Gln Gln Gly Gln Gln Gln Pro Gln  
290 295 300

Gly Gln Gln Pro Gly Gln Gly Gln Pro Gly Tyr Tyr Pro Thr Ser Pro  
305 310 315 320

Gln Gln Ser Gly Gln Gly Gln Gly Tyr Tyr Thr Ser Pro Gln Gln Ser  
325 330 335

Gly Gln Gln Gln Pro Gln Gln Gly Gln Gln Gly Gln Gln Pro Gly  
340 345 350

Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly Gln Pro Gly Gln Gly  
355 360 365

Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Gln Gln Pro  
370 375 380

Gly Gln Trp Gln Gln Pro Gly Gln Gly Gln Pro Gly Tyr Tyr Pro Thr  
385 390 395 400

Ser Pro Gln Gln Pro Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser  
405 410 415

Pro Gln Gln Pro Gly Gln Gly Gln Pro Gln Gln Gln Pro Gln Gly  
420 425 430

Gln Gln Gln Gln Gln Gln Gln Pro Gln Gly Gln Gln Pro Gly Gln  
435 440 445

Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro  
450 455 460

Gln Gln Ser Gly Gln Gly Gln Gln Gly Tyr Tyr Thr Gly Gln  
465 470 475 480

Gln Gly Tyr Tyr Pro Thr Ser Gln Gln Pro Gly Gln Gly Gln Gln Pro  
485 490 495

Gly Gln Gln Gln Gln Gly Gln Tyr Tyr Pro Ser Pro Ser Gly Gln Gly  
500 505 510

Gln Pro Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Gly Gln  
515 520 525

Gly Gln Gln Pro Gly Gln Gln Gly Gln Trp Leu Gln Pro Gly Gln Gly  
530 535 540

Gln Gln Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Gly Gln Gly Gln Gln  
545 550 555 560

Ser Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Gln Gln Ser Gly Gln Gln  
565 570 575

Gln Gly Tyr Asp Ser Pro Tyr His Val Ser Ala Glu Gln Ala Ala Ser  
580 585 590

Leu Lys Val Ala Lys Ala Gln Gln Leu Ala Ala Gln Leu Pro Ala Met  
595 600 605

Cys Arg Leu Glu Gly Asp Ala Leu Ser Ala Ser Gln  
610 615 620

<210> 11

<211> 18

<212> PRT

<213> Wheat

<400> 11

Leu Lys Val Ala Lys Ala Gln Gln Leu Ala Ala Gln Leu Pro Ala Met  
1 5 10 15

Cys Arg

<210> 12

<211> 2073

<212> DNA

<213> Guinea pig

<220>

<221> CDS

<222> (1)..(2073)

<223> transglutaminase enzyme

<400> 12

atg gca gag gat ctg atc ctg gag aga tgt gat ttg cag ctg gag gtc 48

aat ggc cgc gac cac cgc acg gcc gac ctg tgc cgg gag agg ctg gtg 96

ttg cgg cgg ggc cag ccc ttc tgg ctg acg ctg cac ttt gag ggc cgt 144

ggc tac gag gct ggt gtg gac act ctc acc ttc aac gct gtg acc ggc 192

cca gat ccc agt gag gag gcc ggg act atg gcc cg <sup>g</sup> ttc tca ctg tcc	240
agt gct gtc gag ggg ggc acc tgg tca gcc tca gca gtg gac cag cag	288
gac agc act gtc tcg ctg ctg ctc agc acc cca gct gat gcc ccc att	336
ggc ctg tat cgc ctc agc ctg gag gcc tcc act ggt tac cag ggc tcc	384
agc ttc gta ctg ggc cac ttc atc ctg ctc tac aat cct cgg tgc cca	432
gc <sup>g</sup> gat gct gtc tat atg gac tca gac caa gag cgg cag gag tat gtg	480
ctc acc caa cag ggc ttc atc tac cag ggc tcg gcc aag ttc atc aat	528
ggc ata cct tgg aac ttc ggg cag ttt gaa gat ggg atc ctg gat att	576
tgc ctg atg ctc ttg gac acc aac ccc aag ttc ctg aag aat gct ggc	624
caa gac tgc tcg cgc cgc agc aga cct gtc tac gtg ggc cgg gtg gtg	672
agc gcc atg gtc aac tgc aat gac gat cag ggc gtg ctt cag gga cgc	720
tgg gac aac aac tac agt gat ggt gtc agc ccc atg tcc tgg atc ggc	768
agc gtg gac atc ctg cgg cgc tgg aaa gac tat ggg tgc cag cgc gtc	816
aag tac ggc cag tgc tgg gtc ttc gct gct gtg gcc tgc aca gtg ctg	864
cgg tgc ctt ggc atc ccc acc cga gtc gtg acc aac ttt aac tca gcc	912
cac gac cag aac agc aac ctg ctc atc gag tac ttc cga aac gag tct	960
ggg gag atc gag ggg aac aag agc gag atg atc tgg aac ttc cac tgc	1008
tgg gtg gag tcg tgg atg acc agg ccg gac ctg gag cct ggg tac gag	1056
ggg tgg cag gcc ctg gac ccc aca ccc cag gag aag agt gaa ggg aca	1104

tac tgc tgt ggc cca gtt ccg gtt cga gcc atc aag gag ggc cac ctg	1152
aac gtc aag tat gat gca cct ttc gtg ttt gct gag gtc aat gct gac	1200
gtg gtg aac tgg atc cgg cag aaa gat ggg tcc ctg cgc aag tcc atc	1248
aac cat ttg gtt gtg ggg ctg aag atc agt act aag agt gtg ggc cgc	1296
gat gag cga gag gac atc acc cac acc tac aag tac cca gag gga tct	1344
gaa gag gag cgg gaa gct ttt gtt agg gcc aac cac cta aat aaa ctg	1392
gcc aca aag gaa gag gct cag gag gaa acg gga gtg gcc atg cgg atc	1440
cgt gtg ggc cag aac atg act atg ggc agt gac ttt gac atc ttt gcc	1488
tac atc acc aat ggc act gct gag agc cac gaa tgc caa ctc ctg ctc	1536
tgt gca cgc atc gtc agc tac aat gga gtc ctg ggg ccc gtg tgc agc	1584
acc aac gac ctg ctc aac ctg acc ctg gat ccc ttc tcg gag aac agc	1632
atc ccc ctg cac atc ctc tat gag aag tac ggt gac tac ctg act gag	1680
tcc aac ctc atc aag gtg cga ggc ctc ctt atc gag cca gca gcc aac	1728
agc tat gta ttg gcc gag agg gac att tac ctg gag aat cca gaa atc	1776
aag atc cgg gtc ttg ggg gag ccc aag cag aac cgc aag ctg att gct	1824
gag gtg tct ctg aag aat ccg ctc cct gtg ccg ctg ctg ggt tgt atc	1872
ttc acc gtg gaa gga gct ggc ctg acc aag gac cag aag tcg gtg gag	1920
gtc cca gac ccc gtg gaa gca ggg gagcaa gcg aag gta cgg gtg gag	1968
ctg ctg ccg acg gag gtg ggc ctc cac aag ctg gtg gtg aac ttc gag	2016

tgc gac aag ctg aag gcc gtg aag ggc tat cgg aac gtc atc atc ggc	2064
ccc gcc taa	2073
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ggtagttat tgtaaagttc tacaaagcta attaaaagt tattgcatta acttatttca	180
tattacaaac aagagtgtca atggaacaat gaaaaccata tgacatacta taattttgtt	240
tttattattt aaatttatata attcaaagag aataaaatcca catagccgta aagttctaca	300
tgtggtgcat tacaaaata tatatagctt acaaaacatg acaagcttag tttggaaaat	360
tgcaatcctt atcacattga cacataaagt gagtgttag tcataatatt attttcttg	420
ctacccatca tgtatatatg atagccacaa agttactttg atgatgatata caaagaacat	480
tttttaggtgc acctaacaga atatccaaat aatatgactc acttagatca taatagagca	540
tcaagtaaaa ctaacactct aaagcaaccg atgggaaagc atctataaat agacaaggcac	600
aatgaaaatc ctcatcatcc ttcaccacaa ttcaaataatt atagttgaag catagttagta	660
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<212> DNA  
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31

<210> 16  
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ggatccgctt agaaggcattg agtggccgc

29

<210> 17  
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31

<210> 18  
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29

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<400> 22  
ccgggcaca gataaatgtt gtgattca 28

<210> 23  
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<400> 23  
gtcgactgca agttgcagag agttcat 27

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<210> 24
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<223> G1B5 forward primer for amplification of wheat gene Dx5

<400> 24

tgttccatgc aggctacctc ccactac                                27

<210> 25
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gtcgacatgc ctaagcacca tgcgag                                26

<210> 26
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<220>
<223> G2B3 forward primer for amplification of wheat gene Dy10

<400> 26

aagctttca ttttgcatta ttattgggtt                                30

<210> 27
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accttatcca tgcaagctac cttccac                                27

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<400> 28

gaattcgcag atttgcaaaa gcaatggcta ac

32

<210> 29  
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<223> PLT483 reverse primer for amplification of wheat gene Dy12

<400> 29

tcttagagctt gtgagaaaagg ggtaatcatc agtg

34

<210> 30  
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<223> PLT488 forward primer for amplification of wheat gene HMW2

<400> 30

gaattcagct ttgagtgcc gtagatttgc a

31

<210> 31  
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<400> 31

ggatccatat aggatctgtc gcattcatgg ctg

33

<210> 32  
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<220>  
<223> PLT571 forward primer for amplification of wheat gene Glu1a

<400> 32

tctagatggc taagcggttg gtcctc 26

<210> 33  
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<210> 34  
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<400> 34

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<210> 35  
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<220>  
<223> PLT238 reverse primer for amplification of guinea pig gene transglutaminase

<400> 35

gagctcttag gcggggccga tgatgacg 28

<210> 36  
<211> 9  
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<220>  
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<400> 36

Pro Phe Pro Gln Pro Gln Leu Pro Tyr  
1 5

<210> 37  
<211> 9  
<212> PRT  
<213> Artificial Sequence  
  
<220>  
<223> Sequence derived from wheat storage proteins wherein the allergenic amino acid is eliminated (Gln at position 4 may be mutated)  
  
<400> 37

Pro Gln Pro Gln Leu Pro Tyr Pro Gln  
1 5

<210> 38  
<211> 9  
<212> PRT  
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<220>  
<223> Sequence derived from wheat storage proteins wherein the allergenic amino acid is eliminated (Gln at position 6 may be mutated)  
  
<400> 38

Pro Tyr Pro Gln Pro Gln Leu Pro Tyr  
1 5

<210> 39  
<211> 13  
<212> PRT  
<213> Artificial Sequence  
  
<220>  
<223> Sequence derived from wheat storage proteins wherein the allergenic amino acid is eliminated (Gln at position 10 may be mutated)  
  
<400> 39

Leu Gln Leu Gln Pro Phe Pro Gln Pro Gln Leu Pro Tyr  
1 5 10

<210> 40  
<211> 13  
<212> PRT  
<213> Artificial Sequence  
  
<220>  
<223> Sequence derived from wheat storage proteins wherein the allergenic amino acid is eliminated (Tyr and Ser at positions 5 and 8 may be

mutated)

<400> 40

Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly  
1                  5                          10

<210> 41

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Sequence derived from wheat storage proteins wherein the allergenic amino acid is eliminated (Tyr and Ser at positions 5 and 8 may be mutated)

<400> 41

Gln Gln Gly Tyr Tyr Pro Thr Ser  
1                  5

<210> 42

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Sequence derived from wheat storage proteins wherein the allergenic amino acid is eliminated (Gln at positions 4, 5 and 7 may be mutated)

<400> 42

Pro Phe Ser Gln Gln Gln Gln Gln  
1                  5

<210> 43

<211> 12

<212> PRT

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<220>

<223> Sequence derived from wheat storage proteins wherein the allergenic amino acid is eliminated (Gln at positions 4 and 6 may be mutated)

<400> 43

Gln Ser Glu Gln Ser Gln Gln Pro Phe Gln Pro Gln  
1                  5                          10

<210> 44

<211> 9

<212> PRT  
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<220>  
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<220>  
<221> misc\_feature  
<222> (2)..(2)  
<223> Xaa can be any naturally occurring amino acid

<400> 44

Gln Xaa Pro Gln Gln Pro Gin Gln Phe  
1 5